

U.S. Patent Application Serial No. 10/585,634
Response to Final OA dated June 16, 2008

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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): An engine valve operating system, comprising a rocker arm [[63]] which has a valve connecting portion [[63a]] linked and connected to an engine valve [[19]] and a cam-abutting portion [[65]] to abut a valve operating cam [[69]]; a first link arm [[61]] with one end turnably connected to the rocker arm [[63]] via a first connecting shaft [[64]] and the other end turnably supported at a fixed position on an engine body [[10]]; a second link arm [[62]] with one end turnably connected to the rocker arm [[63]] via a second connecting shaft [[66]] disposed side by side in a vertical arrangement with the first connecting shaft [[64]] and the other end turnably supported by a movable shaft [[68a]] which is displaceable; drive means [[72]] connected to the movable shaft [[68a]], being ready to displace the movable shaft [[68a]] in order to vary a lift amount of the engine valve [[19]] continuously; and oil supply means [[58]] which is fixed to the engine body [[10]] and supplies oil to the upper one [[64]] of the first and second connecting shafts [[64, 66]], wherein the oil supply means which is formed of the oil jet with a nozzle hole provided at a tip of the pipe is disposed on one side of each cylinder on the engine body, and the tip of the pipe is placed inside the rim of a combustion chamber when viewed on a projection to a plane orthogonal to the axis of the cylinder.

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Claim 2 (Currently Amended): ~~[[The]]~~ An engine valve operating system according to claim 1, comprising a rocker arm which has a valve connecting portion linked and connected to an engine valve and a cam-abutting portion to abut a valve operating cam; a first link arm with one end turnably connected to the rocker arm via a first connecting shaft and the other end turnably supported at a fixed position on an engine body; a second link arm with one end turnably connected to the rocker arm via a second connecting shaft disposed side by side in a vertical arrangement with the first connecting shaft and the other end turnably supported by a movable shaft which is displaceable; drive means connected to the movable shaft, being ready to displace the movable shaft in order to vary a lift amount of the engine valve continuously; and oil supply means which is fixed to the engine body and supplies oil to the upper one of the first and second connecting shafts.

wherein the rocker arm ~~[[63]]~~ is equipped with a support portion ~~[[63b]]~~ formed into a substantially U shape so as to sandwich a roller ~~[[65]]~~ which is the cam-abutting portion from opposite sides; the one end of the first link arm ~~[[61]]~~ is turnably connected to the support portion ~~[[63b]]~~ via the first connecting shaft ~~[[64]]~~ which supports the roller ~~[[65]]~~; and the oil supply means ~~[[58]]~~ is disposed on the engine body ~~[[10]]~~ so as to supply oil to a mating surface between the first link arm ~~[[61]]~~ and the support portion ~~[[63b]]~~.

Claim 3 (Currently Amended): The engine valve operating system according to claim 1, wherein the oil supply means ~~[[58]]~~ is disposed on cam holders ~~[[46]]~~ installed on the engine body ~~[[10]]~~ so as to rotatably support a camshaft ~~[[31]]~~ on which the valve operating cam ~~[[69]]~~

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is mounted.

Claim 4 (Cancel)

Claim 5 (Cancel)

Claim 6 (Currently Amended): The engine valve operating system according to claim 2, wherein the oil supply means [(58)] is disposed on cam holders [(46)] installed on the engine body [(10)] so as to rotatably support a camshaft [(31)] on which the valve operating cam [(69)] is mounted.

Claim 7 (Currently Amended): The engine valve operating system according to claim 2, wherein the oil supply means [(58)] which is formed of oil jets [(58)], each with a nozzle hole [(58b)] provided at the tip of a pipe [(58a)], is disposed on opposite sides of each cylinder on the engine body [(10)].

Claim 8 (Currently Amended): The engine valve operating system according to claim 3, wherein the oil supply means [(58)] which is formed of oil jets [(58)], each with a nozzle hole [(58b)] provided at the tip of a pipe [(58a)], is disposed on opposite sides of each cylinder on the engine body [(10)].

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Claim 9 (Currently Amended): The engine valve operating system according to claim 6, wherein the oil supply means [(58)] which is formed of oil jets [(58)], each with a nozzle hole [(58b)] provided at the tip of a pipe [(58a)], is disposed on opposite sides of each cylinder on the engine body [(10)].

Claim 10 (Currently Amended): The engine valve operating system according to claim 2, wherein the oil supply means [(58)] which is formed of the oil jet [(58)] with the nozzle hole [(58b)] provided at the tip of the pipe [(58a)] is disposed on one side of each cylinder on the engine body [(10)].

Claim 11 (Cancel)

Claim 12 (Currently Amended): The engine valve operating system according to claim 6, wherein the oil supply means [(58)] which is formed of the oil jet [(58)] with the nozzle hole [(58b)] provided at the tip of the pipe [(58a)] is disposed on one side of each cylinder on the engine body [(10)].